

(No Model.)

2 Sheets—Sheet 1.

F. H. C. MEY.
CONVEYER.

No. 431,232.

Patented July 1, 1890.

Fig. 1.

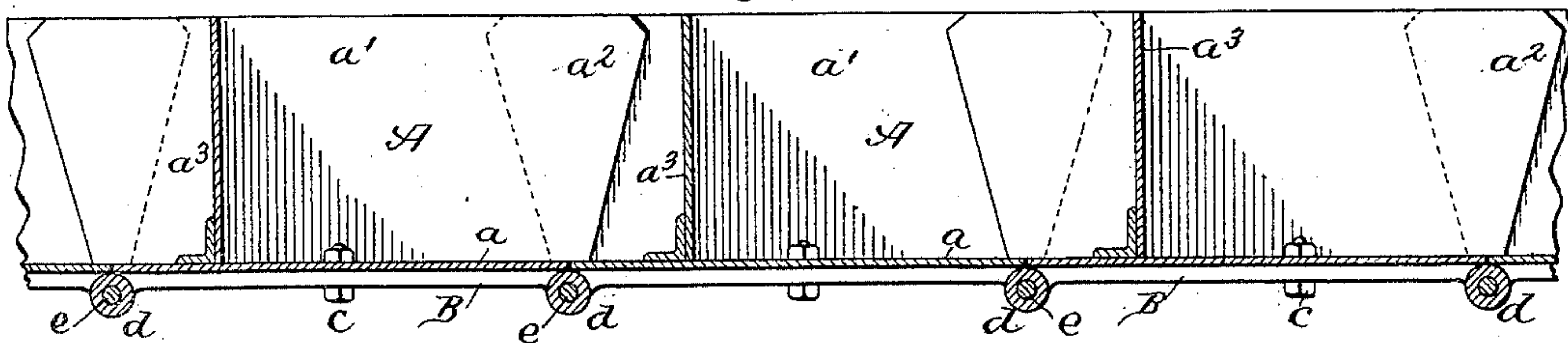


Fig. 2.

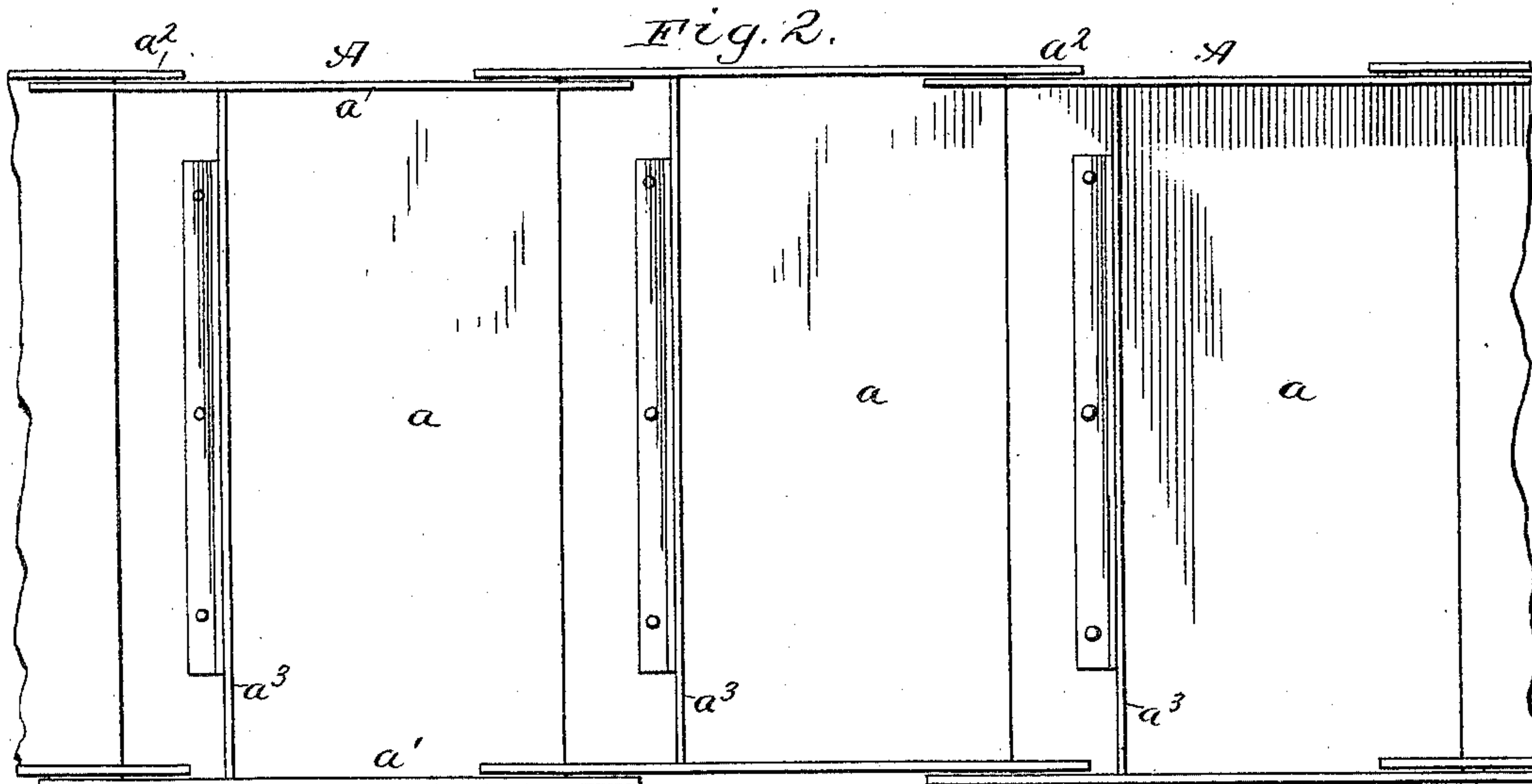
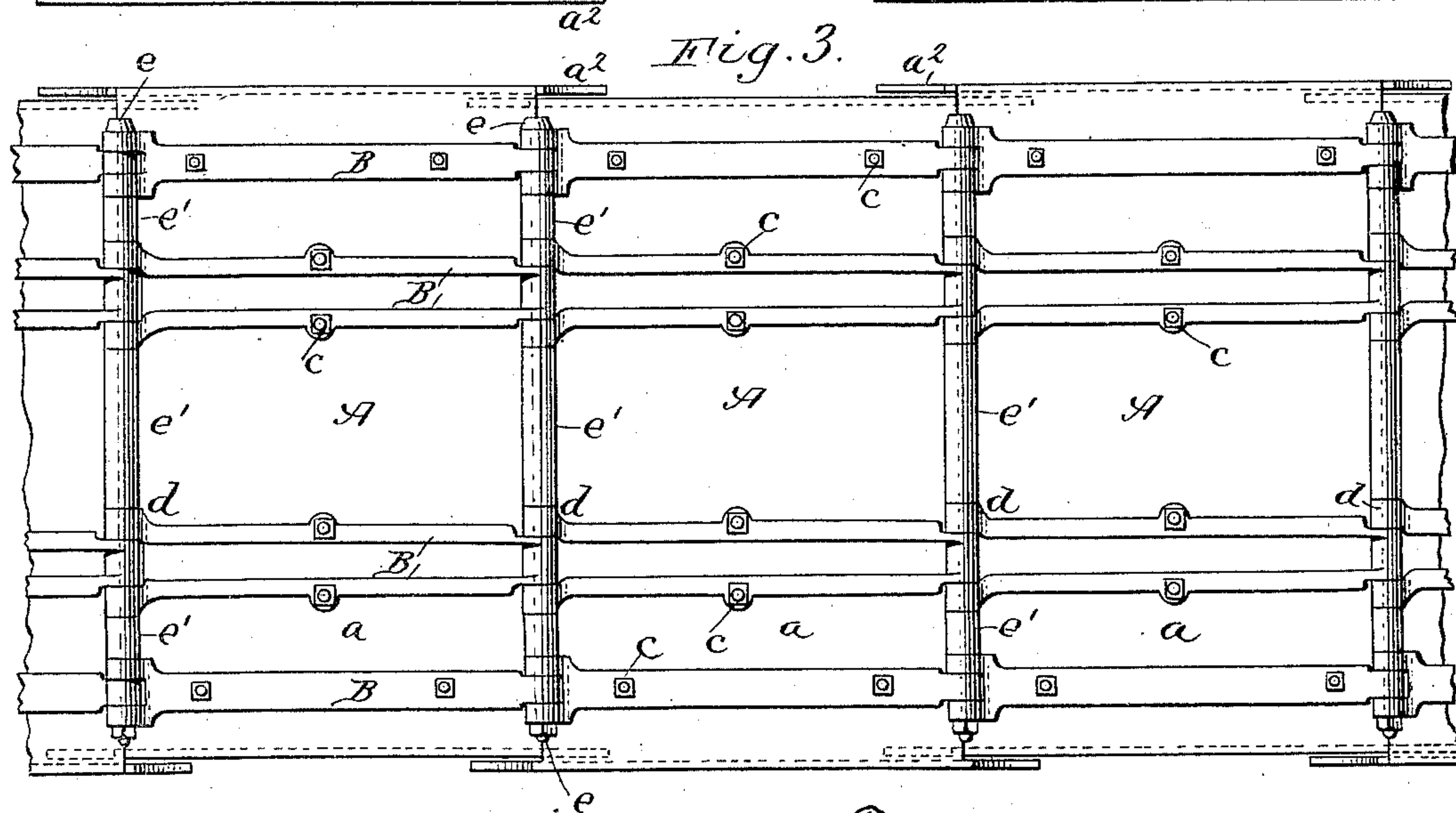


Fig. 3.



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Emil J. Neuhart. } Witnesses.

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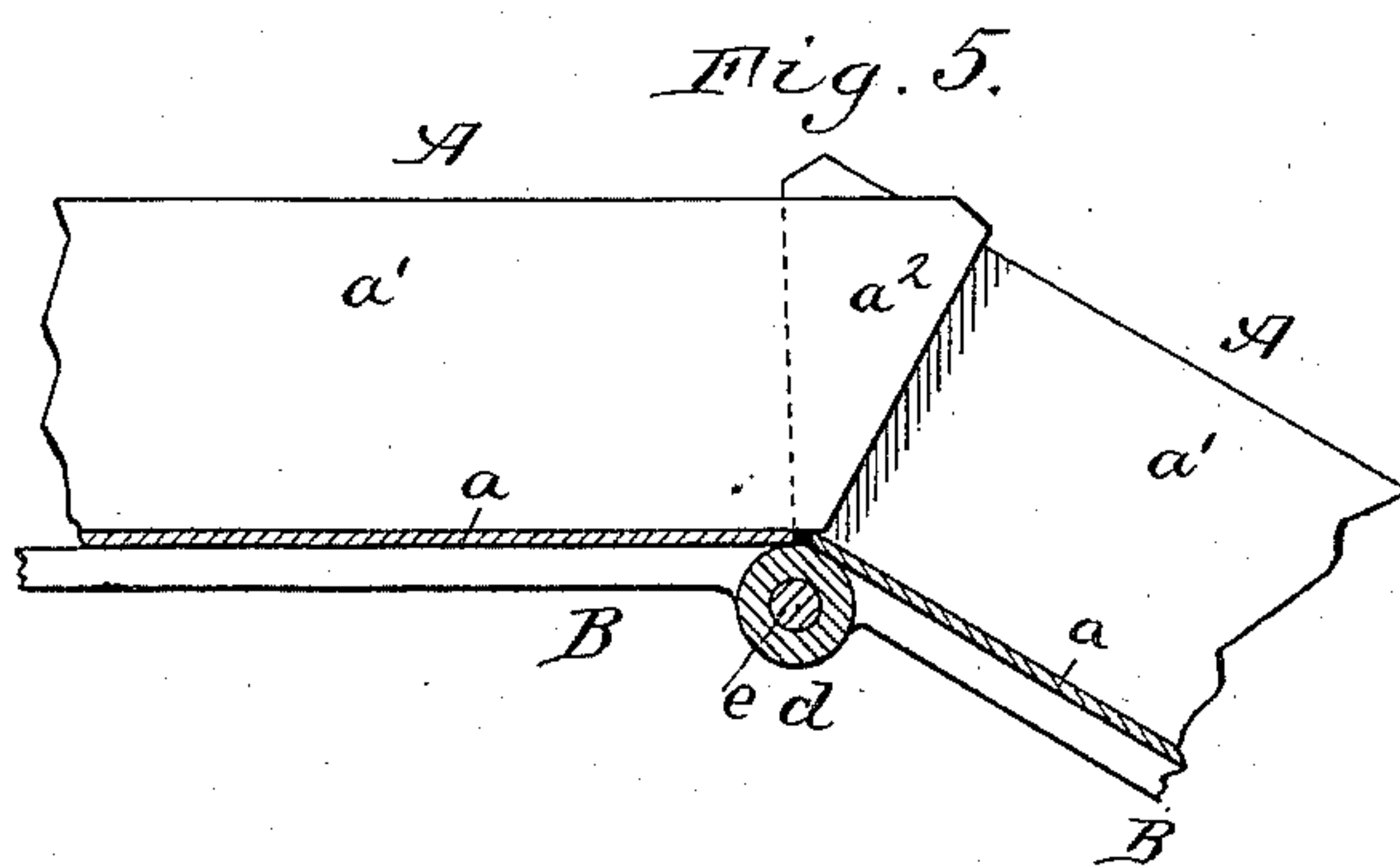
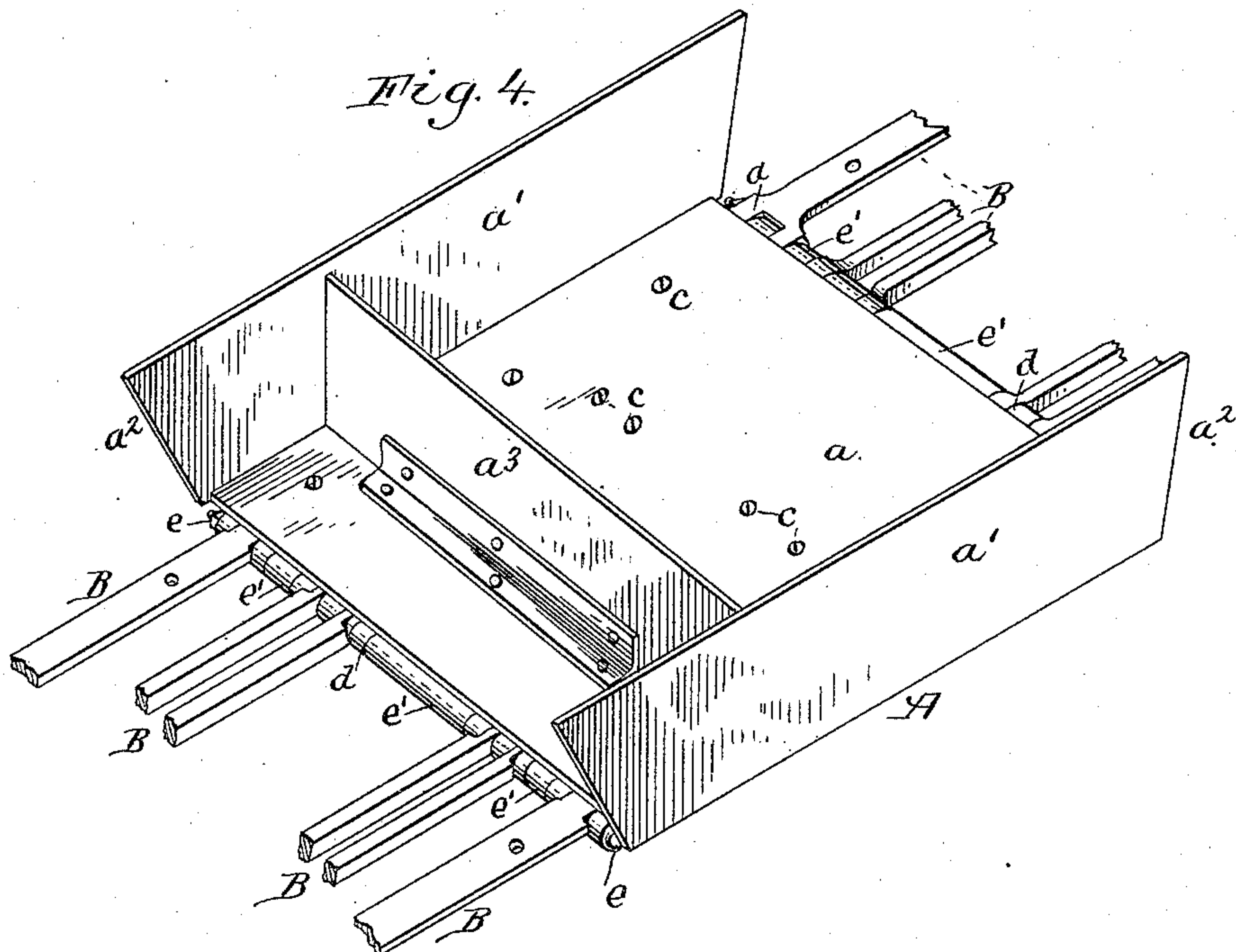
(No Model.)

2 Sheets—Sheet 2.

F. H. C. MEY.
CONVEYER.

No. 431,232.

Patented July 1, 1890.



Chas. J. Buchheit
Emil J. Neuhart. } witnesses. By Wilhelm H. Bonnet.
F. H. C. Mey Inventor
Attorneys

UNITED STATES PATENT OFFICE.

FREDRICK H. C. MEY, OF BUFFALO, NEW YORK.

CONVEYER.

SPECIFICATION forming part of Letters Patent No. 431,232, dated July 1, 1890.

Application filed September 23, 1889. Serial No. 324,736. (No model.)

To all whom it may concern:

Be it known that I, FREDRICK H. C. MEY, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Conveyers, of which the following is a specification.

This invention relates to that class of conveyers which consist of an endless chain belt or belts, to which the buckets are attached, and which are more especially designed for conveying coal and similar material.

Heretofore the adjacent ends or edges of the bottom plates of the buckets have been made to overlap each other, so as to close the space between them and form a practically continuous surface, upon which the material rests. This construction is objectionable, for the reason that the conveyer can be moved in one direction only, and because in conveying ores, coal, or other substances some of the particles enter between the overlapping edges of the bottom plates and are ground or broken, producing considerable dust and dirt and often bending or breaking the base-plates of the buckets, which incurs considerable delay in repairing and replacing the parts.

The object of my invention is to overcome these objections; and it consists to that end of the improvements, which will be hereinafter fully set forth, and pointed out in the claim.

In the accompanying drawings, consisting of two sheets, Figure 1 is a fragmentary longitudinal sectional elevation of my improved conveyer. Fig. 2 is a top plan view thereof. Fig. 3 is a bottom plan view. Fig. 4 is a perspective view of one of the buckets and connecting parts. Fig. 5 is a fragmentary longitudinal sectional elevation of two adjacent buckets on an enlarged scale.

Like letters of reference refer to like parts in the several figures.

A represents the buckets, each consisting of a bottom plate a , side plates a' , having projecting inclined ends a^2 , and a transverse partition-plate a^3 .

B represents the chain belts, two or more of which are preferably arranged side by side, and to which the bottom plates of the buckets are secured by rivets or screw-bolts c .

The projecting inclined ends of the side plates a' extend beyond the bottom plates a , so that the side plates of two adjacent buckets overlap each other and form a practically tight joint along the side walls of the buckets. The adjacent bottom plates do not overlap, but are so arranged that their edges meet and abut against each other when the plates move in the same plane. The bottom plates are made of about the same length as the chain-links, and are secured to the latter in such a manner that the joints between the plates stand directly opposite the eyes or knuckles d of the links and are closed by the latter.

e represents the transverse pivot-pins connecting the links and extending from side to side of the buckets. e' represents sleeves surrounding the pins e between the chains B, and which fill the spaces between the link-eyes of the adjacent chains, and form with the eyes of the links a continuous hinge or knuckle. These sleeves close the portions of the joints between the chains, whereby a practically tight joint is formed below the meeting or adjacent edges of the bottom plates across the entire width of the buckets.

It is obvious that the sleeves e' may be dispensed with and that the eyes of the links may be cast with laterally-projecting hubs of such length that the hubs of one chain will extend to the eyes or hubs of the next adjacent chain, so as to close the space between the chains; but I prefer the construction shown, as it is less expensive and not so liable to be broken.

By arranging the connecting edges of the chain-links across the entire joint of the buckets, as before described, the material on the conveyer is effectually excluded from the joints in all positions of the buckets and a smooth conveying-surface, free from overlapping parts, is obtained, which permits the conveyer to be run in either direction.

It is obvious that, if desired, the side plates of the buckets may be omitted, so as to form an ordinary horizontal conveyer.

I claim as my invention—

The combination, with the bottom plates of the buckets having meeting or abutting ends, of two or more link-belts, to which the said

bottom plates are attached, and having their link-eyes or knuckles arranged against the adjacent ends of said plates, and sleeves interposed between said belts and forming a continuation of the link-eyes and closing the portions of the joints of the plates located between the chains, substantially as set forth.

Witness my hand this 17th day of September, 1889.

FREDRICK H. C. MEY.

Witnesses:

JNO. J. BONNER,
F. C. GEYER.